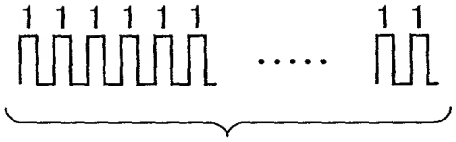
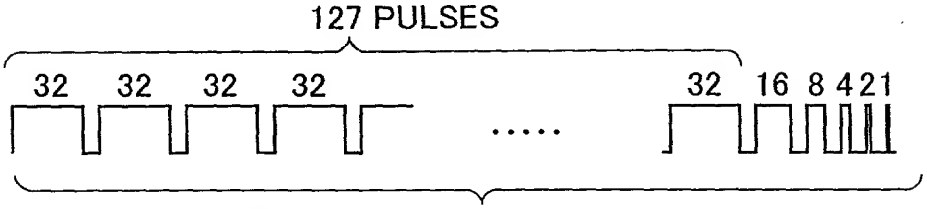
FIG. 1A



4,095-TIME-TRANSFER
REQUIRED:

FIG. 1B



127+1+1+1+1+1=132
4,096-STEPS OF GRADATION
USING 4,096-TIME-TRANSFER OBTAINED

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FIG. 2

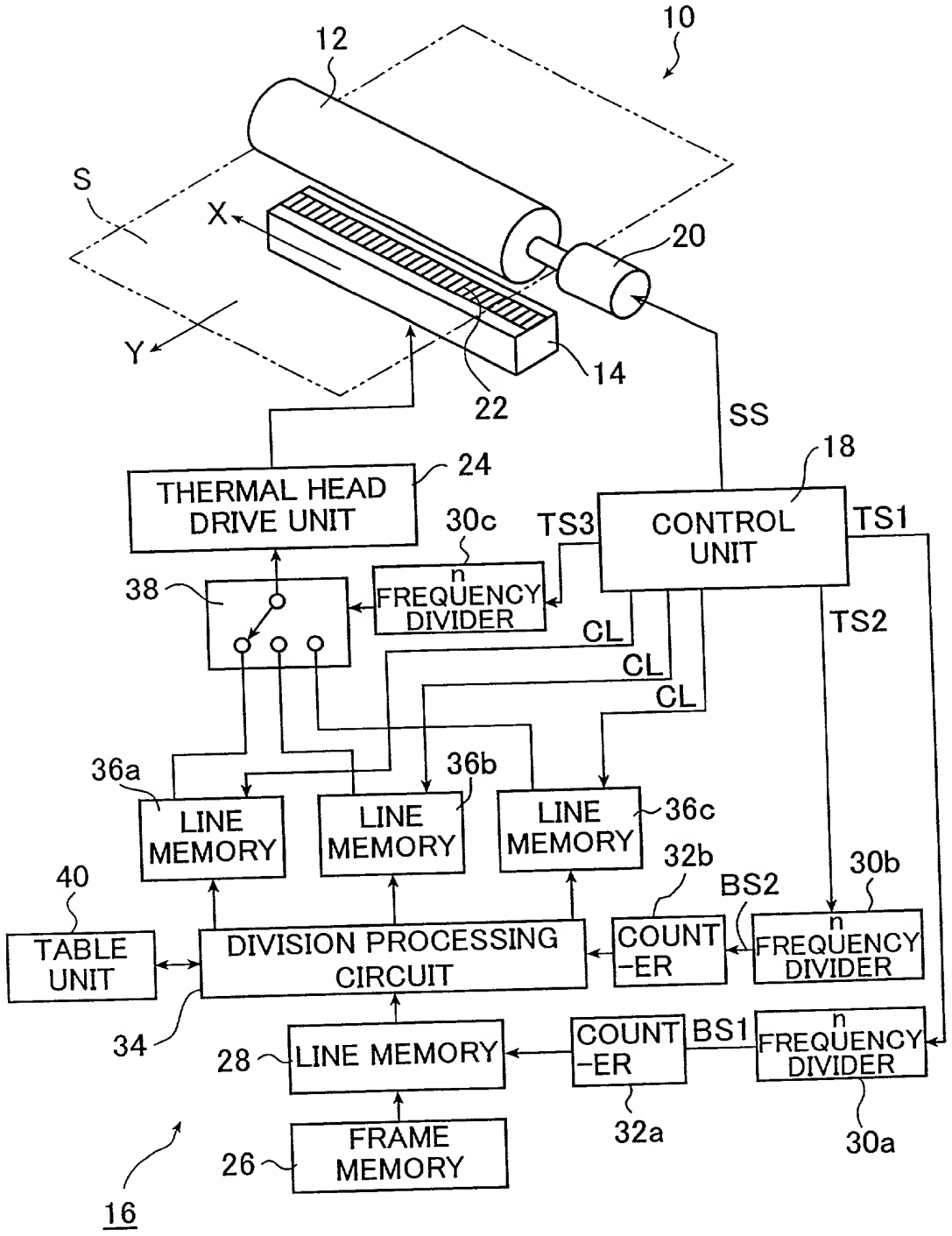
10
12
S
X
Y
20
14
22
SS
18
24
THERMAL HEAD DRIVE UNIT
30c
TS3
CONTROL UNIT
TS1
38
n FREQUENCY DIVIDER
CL
CL
CL
TS2
36a
36b
LINE MEMORY
LINE MEMORY
LINE MEMORY
36c
40
32b
BS2
30b
TABLE UNIT
DIVISION PROCESSING CIRCUIT
COUNT -ER
n FREQUENCY DIVIDER
34
28
LINE MEMORY
COUNT -ER
BS1
n FREQUENCY DIVIDER
32a
30a
26
FRAME MEMORY
16

FIG.3A

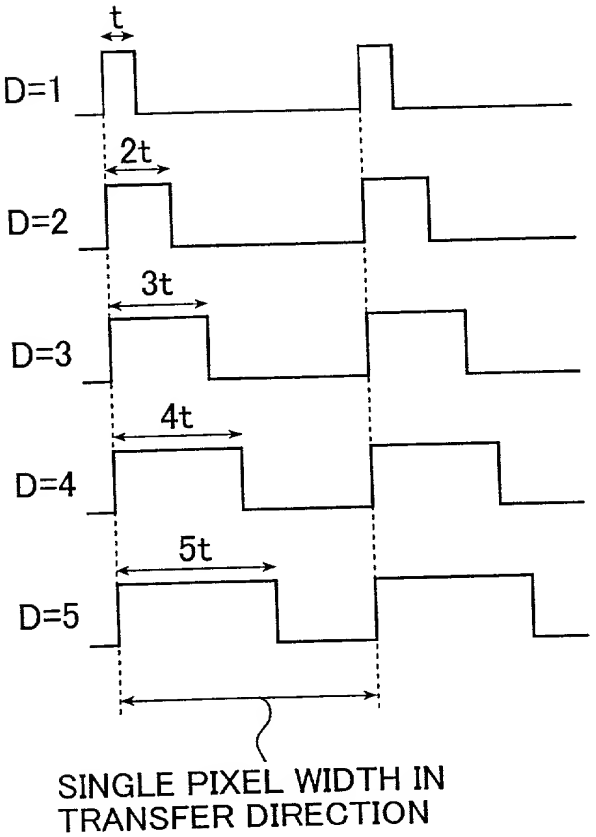
t
D=1
2t
D=2
3t
D=3
4t
D=4
5t
D=5
SINGLE PIXEL WIDTH IN TRANSFER DIRECTION

FIG.3B

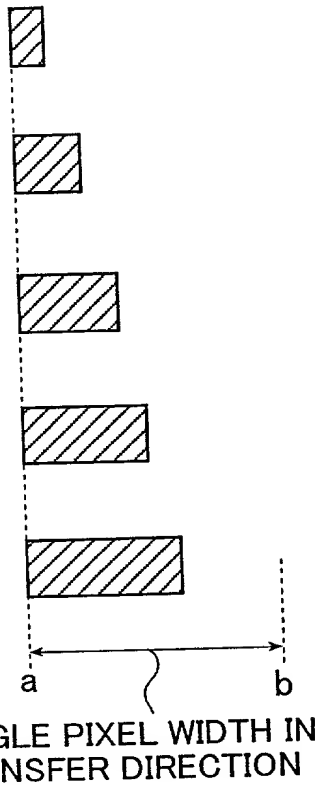
a
b
SINGLE PIXEL WIDTH IN TRANSFER DIRECTION

FIG. 4 (TABLE 1)

"width 32" × 127 + "width 16" + "width 8" + "width 4" + "width 2" + "width 1" (132 steps of dispersion, 132 pulse transfers)
"width 16" × 225 + "width 8" + "width 4" + "width 2" + "width 1" (259 steps of dispersion, 259 pulse transfers)
"width 8" × 511 + "width 4" + "width 2" + "width 1" (514 steps of dispersion, 514 pulse transfers)

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FIG.5(TABLE 2)

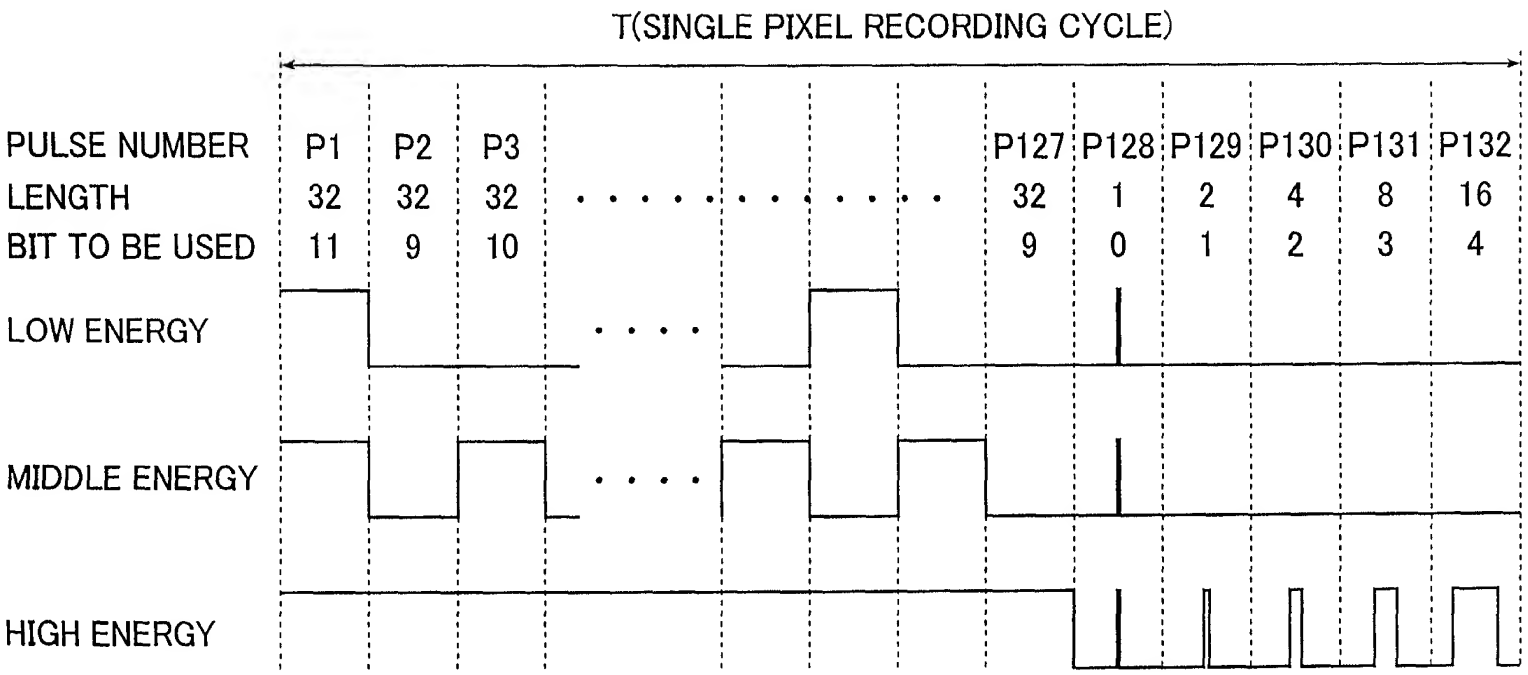

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FIG.6(TABLE 3)

BIT TO BE USED :0～11　　DATA LEVEL 1027

DISPERSION	PIXEL POSITION(0～191)																			
	0	1	2	3	4	5	6	7	8	9	10		184	185	186	187	188	189	190	191
0	11	8	11	10	11	9	11	10	11	5	11		10	11	9	11	10	11	8	11
1	10	11	7	11	10	11	9	11	10	11	8		11	10	11	9	11	10	11	5
2	11	10	11	8	11	10	11	9	11	10	11		7	11	10	11	9	11	10	11
3	9	11	10	11	6	11	10	11	9	11	10		11	8	11	10	11	9	11	10
4	11	9	11	10	11	8	11	10	11	9	11		10	11	6	11	10	11	9	11
5	10	11	8	11	10	11	7	11	10	11	9		11	10	11	8	11	10	11	9
6	11	10	11	9	11	10	11	8	11	10	11	. . .	9	11	10	11	7	11	10	11
7	8	11	10	11	9	11	10	11	5	11	10		11	9	11	10	11	8	11	10
8	11	7	11	10	11	9	11	10	11	8	11		10	11	9	11	10	11	5	11
9	10	11	8	11	10	11	9	11	10	11	7		11	10	11	9	11	10	11	8
10	11	10	11	6	11	10	11	9	11	10	11		8	11	10	11	9	11	10	11
11	8	11	10	11	8	11	10	11	9	11	10		11	6	11	10	11	9	11	10
⋮					. . .											. . .				
125	10	10	11	9	11	10	11	7	11	10	11		9	11	10	11	8	11	10	11
126	11	11	10	11	9	11	10	11	8	11	10		11	9	11	10	11	7	11	10
127	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
128	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1
129	2	2	2	2	2	2	2	2	2	2	2		2	2	2	2	2	2	2	2
130	3	3	3	3	3	3	3	3	3	3	3		3	3	3	3	3	3	3	3
131	4	4	4	4	4	4	4	4	4	4	4		4	4	4	4	4	4	4	4

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FIG.7(TABLE 4)

132 DISPERSION 16×127+1+2+4+8

DATA LEVEL 1027

DISPERSION NUMBER OF DATA TO BE RECORDED (0～131)	PULSE WIDTH	PIXEL POSITION(0～191) COMMAND VALUE	0 1027	1 1027	2 1027	3 1027	4 1027	5 1027	6 1027	7 1027	8 1027	9 1027	10 1027	185 1027	186 1027	187 1027	188 1027	189 1027	190 1027	191 1027	NUMBER OF ON-PULSES AT EACH TIME
0	32		0	0	0	32	0	0	0	32	0	0	0	0	0	0	32	0	0	0	49
1	32		32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	0	0	48
2	32		0	32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	0	48
3	32		0	0	32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	49
4	32		0	0	0	32	0	0	0	32	0	0	0	0	0	0	32	0	0	0	49
5	32		32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	0	0	47
6	32		0	32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	0	49
7	32		0	0	32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	49
8	32		0	0	0	32	0	0	0	32	0	0	0	0	0	0	32	0	0	0	48
9	32		32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	0	0	48
10	32		0	32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	0	49
11	32		0	0	32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	49
⋮	⋮						・・・									・・・					⋮
125	32		32	32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	0	48
126	32		0	0	32	0	0	0	32	0	0	0	32	0	0	32	0	0	0	32	49
127	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	193
128	2		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	193
129	4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	8		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131	16		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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